

Applicants: Nika Adham, et al.
U.S. Serial No.: 09/116,676
Filed: July 16, 1998
Page 3

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-208. (Deleted)

209. (Previously presented) The process of claim 224, wherein the specific binding of the compound to the polypeptide is detected by a scintillation proximity assay.

210-213. (Deleted)

214. (Previously Presented) The process of claim 226, wherein the specific binding of the compound to the polypeptide is detected by a scintillation proximity assay.

215-217. (Deleted)

218. (Previously Presented) The method of claim 228, wherein the cell is a mammalian cell.

219. (Previously Presented) The method of claim 218, wherein the mammalian cell is non-neuronal in origin.

220. (Previously Presented) The method of claim 219 wherein the non-neuronal cell is a COS-7 cell, a 293 human embryonic kidney cell, an LM(tk-) cell or an NIH-3T3 cell.

Applicants: Nika Adham, et al.
U.S. Serial No.: 09/116,676
Filed: July 16, 1998
Page 4

221. (Deleted)

222. (Previously Presented) A process of obtaining a composition which comprises:

- (a) obtaining a chemical compound;
- (b) determining whether the chemical compound binds to a soluble polypeptide by the process of any of claim 224, 209, 225, 226, 214 or 227; and
- (c) admixing a carrier and the chemical compound.

223. (Previously Presented) The method of claim 222, wherein the composition is a pharmaceutical composition and the carrier is a pharmaceutically acceptable carrier.

224. (Currently Amended) A process for determining whether a chemical compound specifically binds to:

- (a) a soluble polypeptide comprising consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10); or
- (b) a soluble polypeptide having a sequence which varies therefrom by no more than 15 amino acids, such variations:
 - (i) not involving amino acids corresponding to the amino acids at positions 799-804 of the amino acid sequence shown in Figure 5 (SEQ ID NO: 10); and

(ii) not changing the functional properties of the soluble polypeptide; or

(c) a soluble polypeptide comprising the soluble polypeptide of (a) or (b) linked to the following consecutive amino acids: [corresponding to] Asp Tyr Lys Asp Asp Asp Asp Lys [a FLAG® epitope],

which comprises contacting the soluble polypeptide of (a), (b) or (c) above with the compound under conditions suitable for binding, and detecting specific binding of the chemical compound to the soluble polypeptide.

225. (Previously Presented) The process of claim 224, wherein the soluble polypeptide comprises consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10).

226. (Currently Amended) A process involving competitive binding for determining whether a first chemical compound specifically binds to:

(a) a soluble polypeptide comprising consecutive amino acids, the amino acid sequence of which is shown in Figure 5 (SEQ ID NO: 10); or

(b) a soluble polypeptide having a sequence which varies therefrom by no more than 15 amino acids, such variations:

(i) not involving amino acids corresponding to the amino acids at positions 799-804 of the amino acid sequence shown in

Figure 5 (SEQ ID NO: 10); and

(ii) not changing the functional properties
of the soluble polypeptide; or

(c) a soluble polypeptide comprising the soluble
polypeptide of (a) or (b) linked to the following
consecutive amino acids: {corresponding to] Asp
Tyr Lys Asp Asp Asp Asp Lys [a FLAG® epitope],

which comprises separately contacting the soluble
polypeptide of (a), (b) or (c) above, with both the
first chemical compound and a second chemical compound
known to bind to the soluble polypeptide, and
separately with only the second chemical compound,
under conditions suitable for binding of both the first
and second compounds, and detecting specific binding of
the first chemical compound to the soluble polypeptide,
a decrease in the binding of the second chemical
compound to the soluble polypeptide in the presence of
the first chemical compound indicating that the first
chemical compound binds to the soluble polypeptide.

227. (Previously Presented) The process of claim 226, wherein
the soluble polypeptide comprises consecutive amino acids,
the amino acid sequence of which is shown in Figure 5 (SEQ
ID NO: 10).

228. (Currently Amended) A method of screening a plurality of
chemical compounds not known to bind to:

(a) a soluble polypeptide comprising consecutive amino
acids, the amino acid sequence of which is shown
in Figure 5 (SEQ ID NO: 10); or

(b) a soluble polypeptide having a sequence which

varies therefrom by no more than 15 amino acids,
such variations:

- (i) not involving amino acids corresponding to the amino acids at positions 799-804 of the amino acid sequence shown in Figure 5 (SEQ ID NO: 10); and
- (ii) not changing the functional properties of the soluble polypeptide; or
- (c) a soluble polypeptide comprising the soluble polypeptide of (a) or (b) linked to the following consecutive amino acids: [corresponding to] Asp Tyr Lys Asp Asp Asp Lys [a FLAG® epitope],

to determine whether a compound specifically binds to the soluble polypeptide of (a), (b) or (c) which comprises:

- (1) preparing a cell extract or cell supernatant from cells transfected with and expressing DNA encoding the soluble polypeptide and contacting the cell extract or cell supernatant with a compound known to bind specifically to the soluble polypeptide;
- (2) contacting the preparation of step (1) with the plurality of compounds not known to bind specifically to the soluble polypeptide, under conditions permitting binding of compounds known to bind the soluble polypeptide;
- (3) determining whether the binding of the compound known to bind to the soluble polypeptide is reduced in the presence of the compounds, relative

Applicants: Nika Adham, et al.
U.S. Serial No.: 09/116,676
Filed: July 16, 1998
Page 8

to the binding of the compound in the absence of
the plurality of compounds; and if so

- (4) separately determining the binding to the soluble polypeptide of each compound included in the plurality of compounds, so as to thereby determine whether a compound specifically binds to the soluble polypeptide of (a), (b) or (c).